comprising applying a photoresist material to a surface of a wall, exposing the applied photoresist material to a suitable light source through a mask which has a pseudorandom two dimensional array pattern, removing unexposed photoresist, and hardening the exposed photoresist material to produce a pseudorandom two dimensional array of alignment features on the wall.--

Remarks

Claims 1, 2, 4, 6, 7, 10, and 12-14 have been amended to eliminate any indefiniteness.

Claims 16 and 17 have been added to recite features previously claimed in the alternative in claims 4 and 13, respectively.

Attached hereto is a marked up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

Respectfully submitted,

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Date

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

All of the claims, whether amended or not, are shown below for the convenience of the Examiner.

1. (Amended) A liquid crystal device comprising a first cell wall and a second cell wall enclosing a layer of liquid crystal material;

electrodes for applying an electric field across at least some of the liquid crystal material;

a surface alignment structure on the inner surface of at least the first cell wall providing a desired alignment to the liquid crystal molecules, wherein the said surface alignment structure comprises one of a random or pseudorandom two dimensional array of features which are at least one of shaped and [/or] orientated to produce the desired alignment.

2. (Amended) A device as claimed in claim 1, wherein the geometry and spacing of the features is such as to cause the liquid crystal material to adopt at least one of a locally planar or tilted planar alignment.

3. A device as claimed in claim 2, wherein the inner surface of the second cell wall is treated to produce a locally homeotropic alignment of the liquid crystal material, whereby the cell functions in a hybrid aligned nematic mode.

4. (Amended) A device as claimed in claim 2, wherein the inner surface of the second cell wall is treated to produce at least one of a locally planar or tilted planar alignment of the liquid crystal material substantially at right angles to the alignment direction on the first cell wall, whereby the cell functions in a TN [or STN] mode.

5. A device as claimed in claim 1, wherein the geometry and spacing of the features is such as to cause the liquid crystal material to adopt a locally homeotropic alignment.

6. (Amended) A device as claimed in claim 1, wherein the features are at least one of shaped and [/or] orientated so as to produce one of a substantially uniform planar or tilted planar alignment of the liquid crystal director in a single azimuthal direction.

7. (Amended) A device as claimed in claim 1, wherein the features are at least one of shaped and [/or] orientated so as to produce one of a substantially uniform planar or tilted planar alignment of the liquid crystal director in a plurality of azimuthal directions.

8. A device as claimed in claim 1, wherein the features comprise posts which are tilted with respect to the normal to the plane of the first cell wall.

9. A device as claimed in claim 1, further including an analyser and a polariser mounted on the cell walls.

10. (Amended) A device as claimed in claim 1, wherein the features are at least one of different height, different shape, different tilt and [/or] different orientation in different regions of the device.

11. A device as claimed in claim 1, wherein tilt angle and orientation of the posts are uniform throughout the device.

12. (Amended) A cell wall for use in manufacturing a liquid crystal device according to claim 1, comprising a wall and an alignment surface microstructure on one surface thereof for aligning the director of a liquid crystal material, [the] said microstructure comprising one of a random or pseudorandom two dimensional array of features which are at least one of shaped and [/or] orientated to produce the desired alignment.

13. (Amended) A method of manufacturing a cell wall in accordance with claim 12, comprising applying a photoresist material to a surface of a wall, exposing the applied photoresist material to a suitable light source through a mask which has a random [or pseudorandom] two dimensional array pattern, removing unexposed photoresist, and hardening the exposed photoresist material to produce a random [or pseudorandom]

two dimensional array of alignment features on the wall.

14. (Amended) A method of manufacturing a cell wall in accordance with claim 12, comprising applying a plastics material to the surface of a wall, and embossing one of a random or pseudorandom two dimensional array of alignment features into the plastics material.

15. A method of manufacturing a liquid crystal device in accordance with claim 1, comprising securing a first cell wall in accordance with claim 11 to a second cell wall, at least one of the cell walls having an electrode structure thereon, so as to produce a cell having spaced apart cell walls the inner surfaces of which each carry at least one electrode structure; filling the cell with a liquid crystal material, and sealing the cell.

Please add the following new claims:

--16. (Newly added) A device as claimed in claim 2, wherein the inner surface of the second cell wall is treated to produce at least one of a locally planar or tilted planar alignment of the liquid crystal material substantially at right angles to the alignment direction on the first cell wall, whereby the cell functions in an STN mode.

17. (Newly added) A method of manufacturing a cell wall in accordance with claim 12, comprising applying a photoresist material to a surface of a wall, exposing the applied photoresist material to a suitable light source through a mask which has a pseudorandom two dimensional array pattern, removing unexposed photoresist, and hardening the exposed photoresist material to produce a pseudorandom two dimensional array of alignment features on the wall.--